#4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of
HELLBERG, R.

Atty. Ref.: 4147-98

Serial No. 10/518,238

TC/A.U.: To be assigned

Filed: December 16, 2004

Examiner: To be assigned

For: EFFICIENT GENERATION OF RADIO FREQUENCY CURRENTS

* * * * * * * * * * * *

August 16, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the references listed on the attached form PTO-1449.

☐ All listed documents are attached.

☒ Copies of U.S. Patent Publications are not required and are not attached.

☒ Listed foreign patent publications and other documents are enclosed.

☐ The listed documents were cited in the ISR and copies should have been supplied by WIPO directly to the US PTO. If copies are not timely received from WIPO, please telephone the undersigned so that copies can be timely supplied for the Examiner's consideration in this US National Phase Application.

This is not to be construed as a representation that a search has been made or that no better prior art exists, or that a reference is relevant merely because cited.

The Examiner is requested to initial the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____
John R. Lastova
Reg. No. 33,149

JRL:sd
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO. [redacted]147-98

SERIAL NO. 10/[redacted]238

APPLICANT

HELLBERG, R.

FILING DATE

December 16, 2004

TC/A.U.

To be assigned

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,923,215	7/1999	Hans			
		6,028,477	2/2000	Gentzler			
		5,808,511	9/1998	Kobayashi			
		5,757,229	5/1998	Mitzlaff			

FOREIGN PATENT DOCUMENTS

		DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

		S.C. Cripps; "Conventional High-Efficiency Amplifier Modes;" RF Power Amplifiers for Wireless Communications; Artech House; Boston; 1999; pages 45-60.
		Lawrence J. Kushner; "Output Performance of Idealized Microwave Power Amplifiers;" Microwave Journal; October 1989; pages 103-116.
		K.-J. Youn, et al.; "Low Dissipation Power and High Linearity PCS Power Amplifier with Adaptive Gate Bias Control Circuit;" Electronics Letters; Aug. 15, 1996; Vol. 32, No. 17; pages 1533-1535.
		T. Iwai et al.; "42% High-Efficiency Two-Stage HBT Power-Amplifier MMIC for W-CDMA Cellular Phone System;" IEEE Transactions MTT; Vol. 48, No. 12; Dec. 2000; pages 2567-2572.
		A. Saleh and D. Cox; "Improving the Power-Added Efficiency of FET Amplifiers Operating with Varying-Envelope Signals;" IEEE Trans. MTT; Vol. 31, No. 1; Jan. 1983; pages 51-56.
		T. H. Miers and V. A. Hirsch; "A Thorough Investigation of Dynamic Bias on Linear GaAs FET Power Amplifier Performance;" 1992 IEEE MTT-S Digest; pages 537-540.
		D. R. Conn and R. H. Hemmers; "Increased Efficiency in QAM Power Amplifiers;" 1998 IEEE MTT-S Digest; pages 1647-1650.
		I. K. Stubbs; "A Dynamic Efficient Bias Scheme Improves SSPA Performance in Aeronautical Satellite Communication Systems;" IEEE Colloquium on 'Evolving Technologies for Small Earth Station Hardware;' Digest No. 1995/037; IEEE, London, UK; 44 pages 5/1-5/8.
		Jean-Serge Cardinal and Fadhel M. Ghannouchi; "A New Adaptive Double Envelope Feedback (ADEF) Linearizer for Solid State Power Amplifiers;" IEEE Trans. MTT; Vol. 43, No. 7; July 1995; pp. 1508-1515.

*Examiner		Date Considered	

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.	SERIAL NO.
4147-98	10[redacted],238

APPLICANT

HELLBERG, R.

FILING DATE	TC/A.U.
December 16, 2004	To be assigned

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,923,215	7/1999	Hans			
		6,028,477	2/2000	Gentzler			
		5,808,511	9/1998	Kobayashi			
		5,757,229	5/1998	Mitzlaff			

FOREIGN PATENT DOCUMENTS

		DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

		S.C. Cripps; "Conventional High-Efficiency Amplifier Modes;" RF Power Amplifiers for Wireless Communications; Artech House; Boston; 1999; pages 45-60.
		Lawrence J. Kushner; "Output Performance of Idealized Microwave Power Amplifiers;" Microwave Journal; October 1989; pages 103-116.
		K.-J. Youn, et al.; "Low Dissipation Power and High Linearity PCS Power Amplifier with Adaptive Gate Bias Control Circuit;" Electronics Letters; Aug. 15, 1996; Vol. 32, No. 17; pages 1533-1535.
		T. Iwai et al.; "42% High-Efficiency Two-Stage HBT Power-Amplifier MMIC for W-CDMA Cellular Phone System;" IEEE Transactions MTT; Vol. 48, No. 12; Dec. 2000; pages 2567-2572.
		A. Saleh and D. Cox; "Improving the Power-Added Efficiency of FET Amplifiers Operating with Varying-Envelope Signals;" IEEE Trans. MTT; Vol. 31, No. 1; Jan. 1983; pages 51-56.
		T. H. Miers and V. A. Hirsch; "A Thorough Investigation of Dynamic Bias on Linear GaAs FET Power Amplifier Performance;" 1992 IEEE MTT-S Digest; pages 537-540.
		D. R. Conn and R. H. Hemmers; "Increased Efficiency in QAM Power Amplifiers;" 1998 IEEE MTT-S Digest; pages 1647-1650.
		I. K. Stubbs; "A Dynamic Efficient Bias Scheme Improves SSPA Performance in Aeronautical Satellite Communication Systems;" IEEE Colloquium on 'Evolving Technologies for Small Earth Station Hardware;' Digest No. 1995/037; IEEE, London, UK; 44 pages 5/1-5/8.
		Jean-Serge Cardinal and Fadhel M. Ghannouchi; "A New Adaptive Double Envelope Feedback (ADEF) Linearizer for Solid State Power Amplifiers;" IEEE Trans. MTT; Vol. 43, No. 7; July 1995; pp. 1508-1515.

*Examiner		Date Considered	

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.